

2015-2016 Degree Map-Bachelor of Science in Computer Science

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/academics/catalog/>.

Possible careers include: Computer and Information Systems Manager, Computer Programmer, Computer Systems Analyst, and Web Administrator

#Remedial Courses (if applicable): ENGL 0303 ___ ENGL 0404 ___ READ 0103 ___ MATH 0903 ___

Sample Schedule
Milestones/Notes

| Semester 1 | Hrs. | Grade | Milestones/Notes | Semester 1 |
|---------------------------------------------------|-----------|------------|----------------------------------------|------------|
| ENGL 1013-Comp I (ACTS=ENGL 1013) | 3 | # | | |
| MATH 2914- Calculus I (ACTS= MATH 2405) | 4 | | #C or > required for Gen Ed. Milestone | |
| U.S. History/Government | 3 | | | |
| TECH 1001-Orientation to the University | 1 | | | |
| COMS 1403- Orientation to Computing, Info, & Tech | 3 | | Milestone | |
| COMS 1411- Computer and Information Science Lab | 1 | | Milestone | |
| Total hours | 15 | GPA | | |

| Semester 2 | Hrs. | Grade | Milestones/Notes | Semester 2 |
|--------------------------------------------|-----------|------------|-------------------------|------------|
| ENGL 1023- Comp II (ACTS= ENGL 1023) | 3 | # | | |
| Social Sciences | 3 | | | |
| MATH 2924- Calculus II (ACTS= MATH 2505) | 4 | | Milestone | |
| COMS 2003- Microcomputer Applications | 3 | | Prerequisite: COMS 1003 | |
| COMS 2104- Foundations of Computer Prog. I | 4 | # | Milestone | |
| Total hours | 17 | GPA | | |

| Semester 3 | Hrs. | Grade | Milestones/Notes | Semester 3 |
|--------------------------------------------|-----------|------------|------------------|------------|
| ELEG 2134/2130- Digital Logic Design/ Lab | 4 | | | |
| Fine Arts & Humanities | 3 | | | |
| COMS 2203- Foundations of Computer Prog II | 3 | | Milestone | |
| COMS 2903-Discrete Structures | 3 | | Milestone | |
| Total hours | 13 | GPA | | |

| Semester 4 | Hrs. | Grade | Milestones/Notes | Semester 4 |
|----------------------------------------------|-----------|------------|------------------------------|------------|
| ENGL 2053-Technical Writing (ACTS=ENGL 2023) | 3 | | | |
| Science Sequence I (excluding BIOL)* | 4 | | | |
| COMS 2213- Data Structures | 3 | | Milestone | |
| COMS 2223- Computer Organization and Prog. | 3 | | | |
| COMS 3913- Advanced Discrete Structures | 3 | | | |
| Total hours | 16 | GPA | COMS ADVISOR ASSIGNED | |

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed at <http://acts.adhe.edu/>

| Fine Arts and Humanities | U.S. History & Government |
|------------------------------------------------------------|-----------------------------------------------------------|
| ART 2123 Experiencing Art (ACTS=ARTA1003) | HIST 1903 Survey of American History |
| MUS 2003 Introduction to Music (ACTS=MUSC1003) | HIST 2003 United States History to 1877 (ACTS=HIST2113) |
| TH 2273 Introduction to Theatre (ACTS=DRAM 1003) | HIST 2043 Honors United States History to 1877 |
| ENGL 2173 Introduction to Film | HIST 2013 United States History from 1877 (ACTS=HIST2123) |
| JOUR 2173 Introduction to Film | POLS 2003 American Government (ACTS=PLSC2003) |
| ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) | Speech Courses |
| ENGL 2013 Intro. to American Literature (ACTS=ENGL2653) | SPH 1003 Intro. to Speech Com. (ACTS=SPCH1003) |
| ENGL 2023 Honors World Literature | SPH 2003 Public Speaking |
| PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103) | SPH 2173 Business and Professional Speaking |
| PHIL 2043 Honors Introduction to Philosophy | |

Prerequisites (if applicable): MATH 1914(ACTS=MATH 1305) ___ OR MATH 1203(ACTS=MATH1203) ___, COMS 1003(ACTS=CPSI1003) ___

Sample Schedule
Milestones/Notes

| Semester 5 | Hrs. | Grade | Milestones/Notes | Semester 5 |
|------------------------------------------------------|-----------|------------|------------------|------------|
| Science Sequence II (excluding BIOL)* | 4 | | | |
| MATH 3153- Applied Statistics I | 3 | | | |
| COMS 2703/2700- Networks and Architecture/LAB | 3 | | | |
| COMS 3213- Adv. Data Structures and Algorithm Design | 3 | | | |
| COMS 3233- Data Design and Implementation | 3 | | | |
| Total hours | 16 | GPA | | |

| Semester 6 | Hrs. | Grade | Milestones/Notes | Semester 6 |
|----------------------------------------------|-----------|------------|-----------------------------|------------|
| Fine Arts & Humanities | 3 | | | |
| SPH 2173- Business and Professional Speaking | 3 | | No substitutions allowed | |
| COMS 3703- Operating Systems | 3 | | | |
| COMS 4163- Personal Software Engineering | 3 | | | |
| COMS 4703/4700- Data Comms. and Networks/LAB | 3 | | | |
| Total hours | 15 | GPA | APPLY FOR GRADUATION | |

| Semester 7 | Hrs. | Grade | Milestones/Notes | Semester 7 |
|--------------------------------------------------|-----------|------------|------------------|------------|
| Social Sciences | 3 | | | |
| MATH 4003- Linear Algebra I | 3 | | | |
| COMS 3053- Implications of Technology on Society | 3 | | | |
| COMS 4033- Systems and Analysis Design I | 3 | | | |
| COMS 4103- Organization of Programming Languages | 3 | | | |
| Total hours | 15 | GPA | | |

| Semester 8 | Hrs. | Grade | Milestones/Notes | Semester 8 |
|--------------------------------------------|-----------|------------|----------------------------------------|------------|
| COMS 4043- Systems Analysis and Design II | 3 | | | |
| COMS 4403- Compiler Design | 3 | | | |
| COMS 4053, 4063 or approved MGMT elective | 3 | | Graduation Requirements: | |
| Math or Science Elective (2000-4000 level) | 2 | | Min. hours 3000-4000 level courses: 40 | |
| General Elective (3000-4000 level) | 2 | | No more than 4 PE activity hours | |
| Total Hours | 13 | GPA | Min. hours required:120 | 2.00+ GPA |

General Electives: 2 hrs. (3000-4000 level)

***Science Sequence:** PHYS 2014/2000 & 2024/2010 or PHYS 2114/2000 & 2124/2010

indicates a "C" or better is required

| U.S. History & Government | Social Sciences |
|---------------------------------------------------------|-----------------------------------------------------------|
| HIST 1503 World Civilization to 1500 (ACTS=HIST1113) | ECON 2013 Principles of Economics II (ACTS=ECON2203) |
| HIST 1513 World Civilization since 1500 (ACTS=HIST1123) | SOC 1003 Introductory Sociology (ACTS=SOC11013) |
| HIST 1543 Honors World Civilization to 1500 | PSY 2003 General Psychology (ACTS=PSYC1103) |
| HIST 2003 U.S. History to 1877 (ACTS=HIST2113) | ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013) |
| HIST 2013 U.S. History since 1877 (ACTS=HIST2123) | ANTH 2003 Cultural Anthropology (ACTS=ANTH2013) |
| HIST 2043 Honors U.S. History to 1877 | GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) |
| HIST 1903 Survey of American History | AMST 2003 American Studies |
| POLS 2003 American Government (ACTS=PLSC2003) | |
| ECON 2003 Principles of Economics I (ACTS=ECON2103) | |
| ECON 2103 Honors Principles of Economics I | |